

In the Claims

Claims 1-36 (cancelled).

Claim 37 (currently amended): A method of forming a capacitor, comprising:

forming a layer comprising ~~titanium and nitrogen~~ titanium nitride over a substrate, the layer comprising ~~titanium and nitrogen~~ titanium nitride being at least a portion of a first capacitor electrode;

densifying the titanium nitride by exposure of the titanium nitride to one or both of an oxidizing atmosphere and a nitridizing atmosphere;

forming a layer comprising aluminum oxide over and physically against the densified titanium nitride ~~layer comprising titanium and nitrogen~~;

forming a high-k dielectric material over the layer comprising aluminum oxide, the high-k dielectric material comprising a composition other than aluminum oxide; and

forming a second capacitor electrode over the high-k dielectric material.

Claim 38 (currently amended): The method of claim 37 wherein the substrate comprises a conductive material; wherein the titanium nitride ~~layer comprising titanium and nitrogen~~ is formed to be physically against the conductive material; and wherein the conductive material and the ~~layer comprising titanium and nitrogen~~ titanium nitride are together incorporated into the first capacitor electrode.

Claim 39 (original): The method of claim 38 wherein the conductive material is conductively-doped silicon.

Claim 40 (original): The method of claim 38 wherein the conductive material is conductively-doped rugged silicon.

Claim 41 (original): The method of claim 37 wherein the layer comprising aluminum oxide is formed by one or both of atomic layer deposition and chemical vapor deposition.

Claim 42 (original): The method of claim 37 wherein the high-k dielectric material is selected from the group consisting of Ta_2O_5 , HfO_x , ZrO_y , barium titanate, barium strontium titanate, strontium titanate, and lead zirconate titanate, where x and y are numbers greater than 0.

Claim 43 (original): The method of claim 37 wherein the layer comprising aluminum oxide is a first layer comprising aluminum oxide, and further comprising forming a second layer comprising aluminum oxide over the high-k dielectric material.

Claim 44 (currently amended): The method of claim 43 ~~wherein the layer comprising titanium and nitrogen is a first layer comprising titanium and nitrogen, and further comprising forming a second layer comprising titanium and nitrogen~~ titanium nitride over the second layer comprising aluminum oxide.

Claim 45 (canceled).

Claim 46 (currently amended): The method of ~~claim 44~~ claim 37 wherein the ~~first and second layers comprising titanium and nitrogen both consist~~ titanium nitride consists essentially of boron-doped titanium nitride.

Claim 47 (new). The method of claim 37 wherein the densifying comprises exposure of the titanium nitride to the oxidizing atmosphere.

Claim 48 (new). The method of claim 37 wherein the densifying comprises exposure of the titanium nitride to the nitridizing atmosphere.

Claim 49 (new). The method of claim 48 wherein the nitridizing atmosphere comprises a nitrogen-containing plasma.